PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 28 (First St) and Baltimore Road in Montgomery County. MD 28 (First St) is assumed to run an east-west direction.

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA seven-phase, fully-actuated mode, with the MD 28 (First St) approaches continuing to run concurrently. Exclusive/Permissive left turn phases shall continue to be provided for both approaches of MD 28 (First St). The pedestrian phases with pushbutton actuation shall remain in operation across the both legs of MD 28 (First St). The pedestrian phases across Baltimore Road shall remain on recall. A new Exclusive/Permissive left turn phase shall be provided for the southbound approach of Baltimore Road. The Baltimore Road approaches shall also continue to run concurrently.

2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.

2. Contact Mr. Bob Gonzales of MCDPW&T at (240) 777-8761 seventy-two hours in advance of intended work.

3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	11 SF
	R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign. (36" x 42") mast arm mounted.	1 EA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of Traffic	1 EA
8013	Remove & Dispose of Equipment (Per Assignment)	1 EA
8024	F&I 1" Electrical conduit-galvanized sleeve.	25 LF
8034	F&I 1" Liquid Tight Flexible Non-Metallic Conduit for Detector Sleeve.	10 LF
8043	Install Overhead Sign.	11 SF
8053	F&I 12" Vehicular Traffic Signal Head Section (BLACK FACED)	13 EA
8055	F&I Electrical Cable 2-Conductor Aluminum Shielded.	500 LF
8059	F&I Electrical Cable 7-Conductor No. 14 AWG.	665 LF
8060	F&I Loop Wire Encased In Flexible Tubing No. 14 AWG.	260 LF
8061	F&I Saw Cut for Signal (Loop Detector).	110 LF

C. EQUIPMENT TO BE REMOVED

ALL SIGNAL MATERIALS TO BE REMOVED ARE TO BECOME PROPOERY OF THE CONTRACTOR.

The contact persons for District #3 (Montgomery County) are as follows:

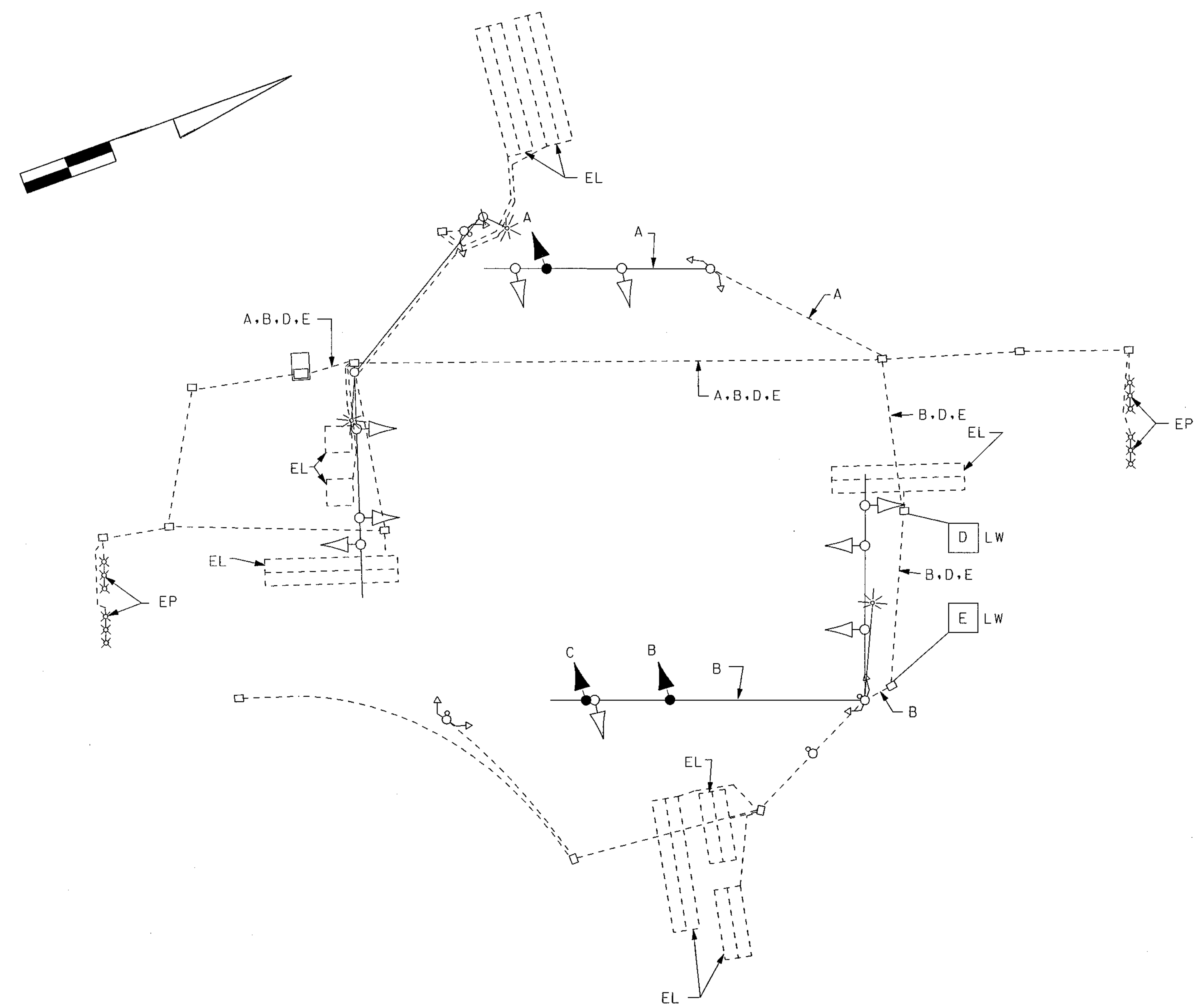
Mr. Lee Starkloff
Assistant District Engineer - Traffic
Phone: (301 513-7318

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

WIRING DIAGRAM



WIRING KEY

A } 7-CONDUCTOR ELECTRICAL
B } CABLE (NO. 14 A.W.G)

C - USE EXISTING WIRING

D } 2 CONDUCTOR ALUMINUM SHIELDED
E } CABLE (NO. 14 AWG).

PS - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY PEPCO

EP - EXISTING MICROLOOP LEAD-IN CABLE

EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING

PS - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY PEPCO

LW = LOOP WIRE

MD 28 RUNS IN AN EAST-WEST DIRECTION

SEQUENCE OF OPERATION SHEET

DIVISION OF OPERATIONS
TRAFFIC ENGINEERING & OPERATIONS SECTION
MONTGOMERY COUNTY, MARYLAND

INTERSECTION: MD 28 AND BALTIMORE RD

NO. ______

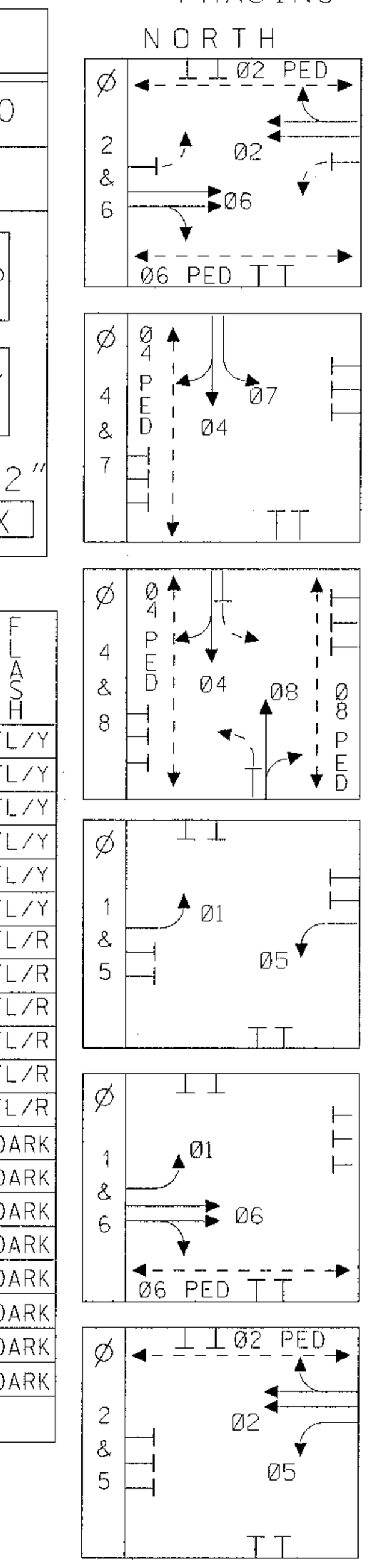
SIGNAL HEAD INDICATIONS					
SIGNAL NO.	3,6,7,8,9,12		2,5,10,11	1,4	13-20
TOTAL:	6		4	2	8
LEGEND: OPTICALLY LIMITED; R RED; Y YELLOW; G GREEN; ◄ ARROW; F FLASHING	R, Y, G 12"	Y 12"	R, ◄Y Y, ◄G G 12"	R, ◄Y Y, ◄G G 12"/8"	9" or 12" X

SIGNAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	FLASH
1	G	G	Y	R	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	◄G/G	◄Y/G	G	R	R	R	FL/Y
2	G	G	Y	R	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	◄G/G	◄Y/G	G	R	R	R	FL/Y
3	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	FL/Y
4	G	G	Y	R	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	R	R	R	◄G/G	◄Y/G	G	FL/Y
5	G	G	Y	R	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	R	R	R	◄G/G	◄Y/G	G	FL/Y
6	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	FL/Y
7	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
8	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
9	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
10	R	R	R	R	◄G/G	◄Y/G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
11	R	R	R	R	◄G/G	◄Y/G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
12	R	R	R	R	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
13	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
14	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DW	DW	DW	DARK
15	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DW	DW	DW	DARK
16	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
17	DW	DW	DW	DW	WK	WK	WK	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
18	DW	DW	DW	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
19	DW	DW	DW	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
20	DW	DW	DW	DW	WK	WK	WK	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
PHASE	2 & 6			ALL RED	4 & 7		ALL RED	4 & 8				ALL RED	1 & 5		ALL RED	1 & 6		ALL RED	2 & 5		ALL RED	

NOTES:

SUBMITTED: ______ CHECKED: ______ APPROVED: ______
IN SERVICE BY: ______ DATE: ______ TIME: ______

PHASING



SHA#: MD325A56/B5B TOD#: AT288-39

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy., N.W.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

4498GI.dgn

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 28 AND BALTIMORE ROAD

DRAWN BY:	D.A. NIES	F.A.P. NO.		TS NO. 66F	SHEET NO. 2 OF 2
CHECKED BY:	JAMES ALLEN	S.H.A. NO.	AT2885185		
SCALE:	NONE	COUNTY:	MONTGOMERY	T.I.M.S. NO. F933	
DATE:	12/03/03	LOG MILE:	150028023.15		